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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/643,244

08/18/2003

Stephen John Dyks

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EXAMINER

BEKKER, KELLY JO

ART UNIT

PAPER NUMBER

1781

NOTIFICATION DATE

DELIVERY MODE

01/20/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentgroupus@unilever.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/643,244	<b>Applicant(s)</b> DYKS ET AL.	
	<b>Examiner</b> KELLY BEKKER	<b>Art Unit</b> 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2010 and 19 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 13-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on October 12, 2010 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The 112 second paragraph rejection of claim 16 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, specifically for the recitation of "an overrun of between 30% and 130% and above 40%" has been withdrawn in light of applicant's amendments made October 12, 2010.

Claims 1, 3-10, and 13-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 13 recite "parallel rollers each having internally a roller cavity... at least one open mould cavity on a surface of each forming element". It is unclear as to what the "internal roller cavity" is; it is unclear as to if the internal roller cavity is the

same as the mould cavity later recited in the claims or if the internal roller cavity is something different. It is unclear as to what the term “internal” means in relation to the cavity; for example it is unclear as to if the term means that the cavity is entirely within the roller or if the term means that the cavity is recessed into the roller from the surface, or if the term has some other meaning. Furthermore it is noted that if the internal roller cavity is not the same as the mould cavity the term does not have support in the specification as originally filled and would be rejected under 112 first paragraph as failing to comply with written description.

Claim 17 recites “said forming element surface being open after the filling devices to where the expanded frozen aerated product in each cavity is pressed against the expanded frozen aerated product in the other cavity”. “It is unclear as to what the term “open” means in relation to the claim; it is unclear as to how a surface can be opened or closed when there is no disclosed or recited closing mechanism; it is unclear as to if applicant intended the term to mean that the cavity is unfilled above the surface, that the cavity is uninhibited above the surface, that the confection does not expand above the surface, etc. Additionally, the term “to” is believed to be meant as “until”.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-10, 13-16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over) Ezaki (JP App # 60230711 as translated) in view of the combination of Hui (ed.) (Dairy Science and Technology Handbook pages 251 and 251) and Martinez et al (EP 0864256 A2).

Ezaki discloses of a method for producing a molded ice cream product, i.e. an aerated confection, comprising;

- a. Providing two separate forming elements which are a pair of parallel rollers each having internally a roller cavity,
- b. Providing at least one open cavity on a surface of each forming element,

- c. Providing filling devices for filling said cavities with a frozen aerated material,
- d. Filling two cavities, one on each forming element  
Where in:
  - i. The two cavities are moved opposite one another and the frozen aerated product in each cavity is pressed against the frozen aerated product of the other cavity.

Ezaki teaches that the two separate forming elements are a pair of rollers wherein each roller has a multiplicity of open cavities on the surface, and the rollers counter rotate so that the respective cavities in the two forming elements lie opposite one another and the frozen aerated products of each cavity are pushed toward one another. Ezaki teaches that the filling device has an output for each forming element. Refer specifically to Figure 1, Page 2 lines 19-24, page 4 line 15 through page 5 line 11. Ezaki teaches that the product has a temperature of -7C when filled into the open cavities, thus teaching filling a frozen material (page 8, lines 24-25). Ezaki teaches that the product filled into the cavities is an aerated frozen confection by teaching that the product filled into the cavities is ice cream (page 2 lines 19-22).

Specifically regarding the product as expanded outside the filling cavity, the references teaches and/or makes obvious the instant limitation.

- (1) Ezaki teaches of the instantly claimed limitation.

When referring to Figure 1, Ezaki teaches that there is a space between the sliding surface and the mold cavities (Page 4 lines 15-20), thus teaching that there is space to allow the confection to expand outside the open cavity.

Ezaki teaches that the confection fills not only the depressions or molds (Figure 1, 17 and 8), but also the grooves that are outside the surface of the filling cavity (Figure 1, 26b). Refer specifically to page 9 lines 11-15. Thus, Ezaki teaches that the frozen confection, which includes ice cream, is outside the open cavity prior to the open cavities moving towards one another and closing as recited in claim 1 c, claim 13 c, and claim 17 b.

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Regarding the confection as actively expanding, as applicant claims a frozen aerated confection, including ice cream; applicant claims that the confection is "allowed" to expand and does not require any steps to provoke or excite the expansion; it would thus be an inherent property of the confection or ice cream to expand when allowed. Since Ezaki teaches of the same type of confection, i.e. an ice cream, as instantly claimed by applicant and teaches that there is space for the confection to expand, one of ordinary skill in the art at the time the invention was made would expect the confection as taught by Ezaki expand outside its open cavity as instantly claimed absent any clear and convincing arguments and/or evidence to the contrary. The position of the office regarding the inherency of expansion is supported as water was known as a primary ingredient in frozen confections, including ice creams, and water was known to expand upon freezing; as the ice cream further solidified in the chilled mold as taught by Ezaki in view of Martinez (as discussed below), one of ordinary skill in the art would expect that the confectionary product expand as instantly claimed; and as admitted by applicant in the declaration, filed November 19, 2010, bullet 5, the confection of Ezaki is a product which will expand when allowed and as stated above, Ezaki teaches that there is space to allow the confection to expand outside the open cavity.

Applicant is reminded that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

(2) Even if the product of Ezaki does not expand *before the filled mold cavities are opposite one another*, to allow such expansion would have been an obvious

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suggestion of Ezaki and the knowledge generally available to one of ordinary skill in the art as:

Ezaki clearly teaches that the portion above the periphery of the mold cavity should be filled with confectionary material in order to provide for a final product in which the respective molded pieces are reliably connected from the use of a strong force and do not become attached to the walls of the depression.

-Ezaki teaches that ice candies will become attached to the walls of the depressions when cooled and therefore cannot be used in parallel rollers *without alteration* (page 3 lines 12 through page 4 line 10);

-Ezaki teaches that the ice candies will not attach to the walls of the depression and will become connected reliably to each other when the portion above the periphery of the recessed mold cavity, contains material which is raised outward from the outer periphery levels of the rollers (page 5 lines 1-11 and page 11 lines 5-9).

-Ezaki teaches that the excess material provides for a stronger force to unite the confectionary halves (page 9 lines 1-17).

Ice cream provided from a filling device into a mold was known to expand.

The position of the office of such a known property is support by applicant's declaration filed November 19, 2010, bullet 5, in which applicant admits that the confection of Ezaki is a product which will expand when allowed.

Thus, it would have been obvious to one of ordinary skill in the art for the mold cavity to include confectionary material above the periphery of the roller in order to form an improved molded product as taught by Ezaki. One of ordinary skill in the art would have concluded that the excess material could be provided by one of two ways, either filling the area with excess confection or by allowing the confection filled within the cavity to expand outside the mold cavity. One of ordinary skill in the art would have been further motivated for the excess confection to be provided by expansion of confection which was filled into the cavity in order to provide a final product that was less dense; in other words when the excess confection was provided by filling the area, when formed the product would contain a greater amount of the confection and be more dense, as

opposed to when the excess confection was provided by allowing the confection which was filled into the cavity to expand and thus forming a product which would contain more gas and less confection. Based on the teachings and suggestions of the prior art and the knowledge generally available, one of ordinary skill in the art would have a reasonable expectation of success in yielding predictable results.

(3) Alternatively, to switch the order of performing process steps, i.e. the order of the addition of the ingredients into the final mixture, would be obvious absent any clear and convincing evidence and/or arguments to the contrary (MPEP 2144.04 [R-1]). “Selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results”; In the instant case as Ezaki teaches of a product which is joined together by a strong force, because of the excess confectionary material outside of the mold cavities, and as the product of Ezaki would inherently expand, as discussed above and as admitted by applicant (declaration filed November 19, 2010, bullet 5) and the instant disclosure is for the claimed product, wherein the product is allowed to expand and then joined together with a strong force, because of excess material outside of the mold cavities, one of ordinary skill in the art would not expect that the switched order of confectionary expansion before or after combining of the mold pieces to provide for new and unexpected results, absent any clear and convincing arguments and/or evidence to the contrary.

Ezaki is silent to the overrun of the frozen confection as about 30-130% as recited in claims 1 and 13, preferably from 45-130% as recited in claim 16, to the molds rotated at variable rotational speeds as recited in claim 4, to the location of the molds at the minimum and maximum rotational speed of the mold as recited in claims 5-10, and to the surface of the forming elements in the mold as cooled to a temperature below -80C by introducing a refrigerating medium into the roller cavities as recited in claims 1, 13, wherein the elements are cooled with liquid nitrogen as recited in claim 15 and are preferably at a temperature of below -100C as recited in claim 14.

Hui discloses of novelty equipment utilized for ice creams. Hui teaches that the sales performance of novelties has been and continues to be strong. Hui teaches the process of filling molds with expanded ice cream products (i.e. ice cream with overrun)



is performed at high speeds. Hui teaches that with molding, a pump arrangement is included. Hui teaches that when pumping it is effective to produce a product that melts more slowly and retains more overrun. Hui teaches of a savings for a 2.75 fluid ounce bar (i.e. mould) at a 65% overrun. Refer specifically to Pages 251 and 252.

Martinez et al (Martinez) teaches a process for the manufacture of frozen ice confections, including ice creams, in a split molds (abstract paragraph 57 and page 2 lines 47-48). Martinez teaches that the molds, i.e. the forming elements, are pre-cooled to below -50C, including below -100C by the use of a cryogenic liquid, typically nitrogen, being introduced into the mold cavity (abstract and page 3 lines 3-12). Martinez teaches that the cooled mold allows for ready release of the confectionary product from the mold (page 2 lines 10-21).

Regarding the overrun percentage as 30-130%, preferably from 45-130%, it would have been obvious to one skilled in the art at the time the invention was made to include an overrun of 65% since Hui teaches that overrun ice cream products which are molded and extruded at 65% increase the amount of the final product (or save a portion of the product that could be lost). To select a particular percentage of overrun would have been obvious depending on the particular degree of savings desired.

Regarding the rotation speed of the rollers, specifically variable rotational speeds and the rotational speed of both the rollers at a stop or minimum speed when the filling device is over a mold cavity and two filled mold cavities face each other, and at a maximal value when the filling device is between two mold cavities, it would have been obvious to one of ordinary skill in the art at the time the invention was made to stop both the rollers, i.e. to be at a minimal rotational value, at the same time when the filling device is over a mold cavity and two filled mold cavities face each other so that the mold cavities could be properly filled (i.e. without spillage, to the correct level, etc) and so that the frozen confection material within the mold cavities can solidify and expand to take the shape of the mold cavity and bond to one another. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the maximal rotational value of the rollers to be when the filling device is between two mold cavities, in order to expedite the processing, such that there is minimal lag time between the

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fillings. One would have been further motivated to vary the rotation speeds depending on the desired degree of filling and pressure in the molding cavity. To determine appropriate rotation speed of a circular mold for filling depending on the molding apparatus and filling to be molded would be routine practice of one of ordinary skill in the art at the time the invention was made.

Regarding the forming elements in the mold as at a temperature below -80C, preferably below -100C wherein the elements are cooled by the introduction of liquid nitrogen into the cavities, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cool the forming elements by introducing liquid nitrogen into the cavities until a temperature of below -50C, including below -100C, in order to keep the confectionary products frozen and allow for easy release of the confectionary product from the mold as taught by Martinez. One would have been further motivated to use liquid nitrogen to cool the forming elements since Martinez teaches that liquid nitrogen is typically used to cool the molds and thus one of ordinary skill in the art at the time the invention was made would expect that the liquid nitrogen be readily available and affordable.

Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over) Ezaki (JP App # 60230711 as translated) in view of Hui (ed.) (Dairy Science and Technology Handbook pages 251 and 251).

Ezaki discloses of a method for producing a molded ice cream product, i.e. an aerated confection, comprising;

- e. Providing two separate forming elements which are a pair of parallel rollers each having internally a roller cavity,
- f. Providing at least one open cavity on a surface of each forming element,
- g. Providing filling devices for filling said cavities with a frozen aerated material,
- h. Filling two cavities, one on each forming element

Where in:

- ii. The two cavities are moved opposite one another and the frozen aerated product in each cavity is pressed against the frozen aerated product of the other cavity.

Ezaki teaches that the two separate forming elements are a pair of rollers wherein each roller has a multiplicity of open cavities on the surface, and the rollers counter rotate so that the respective cavities in the two forming elements lie opposite one another and the frozen aerated products of each cavity are pushed toward one another. Ezaki teaches that the filling device has an output for each forming element. Refer specifically to Figure 1, Page 2 lines 19-24, page 4 line 15 through page 5 line 11. Ezaki teaches that the product has a temperature of -7C when filled into the open cavities, thus teaching filling a frozen material (page 8, lines 24-25). Ezaki teaches that the product filled into the cavities is an aerated frozen confection by teaching that the product filled into the cavities is ice cream (page 2 lines 19-22). As stated above, the limitations in claim 17 d are unclear, however, when referring to Figure 1, as Ezaki teaches that there is a space between the sliding surface and the mold cavities (Page 4 lines 15-20), it is believed that the teachings of Ezaki met the instantly claimed limitations.

Specifically regarding the product as expanded outside the filling cavity, the references teaches and/or makes obvious the instant limitation.

- (1) Ezaki teaches of the instantly claimed limitation.

When referring to Figure 1, Ezaki teaches that there is a space between the sliding surface and the mold cavities (Page 4 lines 15-20), thus teaching that there is space to allow the confection to expand outside the open cavity.

Ezaki teaches that the confection fills not only the depressions or molds (Figure 1, 17 and 8), but also the grooves that are outside the surface of the filling cavity (Figure 1, 26b). Refer specifically to page 9 lines 11-15. Thus, Ezaki teaches that the frozen confection, which includes ice cream, is outside the open cavity prior to the open cavities moving towards one another and closing as recited in claim 1 c, claim 13 c, and claim 17 b.

Regarding the confection as actively expanding, as applicant claims a frozen aerated confection, including ice cream; applicant claims that the

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confection is "allowed" to expand and does not require any steps to provoke or excite the expansion; it would thus be an inherent property of the confection or ice cream to expand when allowed. Since Ezaki teaches of the same type of confection, i.e. an ice cream, as instantly claimed by applicant and teaches that there is space for the confection to expand, one of ordinary skill in the art at the time the invention was made would expect the confection as taught by Ezaki expand outside its open cavity as instantly claimed absent any clear and convincing arguments and/or evidence to the contrary. The position of the office regarding the inherency of expansion is supported as water was known as a primary ingredient in frozen confections, including ice creams, and water was known to expand upon freezing; as the ice cream further solidified in the chilled mold as taught by Ezaki in view of Martinez (as discussed below), one of ordinary skill in the art would expect that the confectionary product expand as instantly claimed; and as admitted by applicant in the declaration, filed November 19, 2010, bullet 5, the confection of Ezaki is a product which will expand when allowed and as stated above, Ezaki teaches that there is space to allow the confection to expand outside the open cavity.

Applicant is reminded that where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

(2) Even if the product of Ezaki does not expand *before the filled mold cavities are opposite one another*, to allow such expansion would have been an obvious suggestion of Ezaki and the knowledge generally available to one of ordinary skill in the art as:

Ezaki clearly teaches that the portion above the periphery of the mold cavity should be filled with confectionary material in order to provide for a final product in which the respective molded pieces are reliably connected from the use of a strong force and do not become attached to the walls of the depression.

-Ezaki teaches that ice candies will become attached to the walls of the depressions when cooled and therefore cannot be used in parallel rollers *without alteration* (page 3 lines 12 through page 4 line 10);

-Ezaki teaches that the ice candies will not attach to the walls of the depression and will become connected reliably to each other when the portion above the periphery of the recessed mold cavity, contains material which is raised outward from the outer periphery levels of the rollers (page 5 lines 1-11 and page 11 lines 5-9).

-Ezaki teaches that the excess material provides for a stronger force to unite the confectionary halves (page 9 lines 1-17).

Ice cream provided from a filling device into a mold was known to expand.

The position of the office of such a known property is support by applicant's declaration filed November 19, 2010, bullet 5, in which applicant admits that the confection of Ezaki is a product which will expand when allowed.

Thus, it would have been obvious to one of ordinary skill in the art for the mold cavity to include confectionary material above the periphery of the roller in order to form an improved molded product as taught by Ezaki. One of ordinary skill in the art would have concluded that the excess material could be provided by one of two ways, either filling the area with excess confection or by allowing the confection filled within the cavity to expand outside the mold cavity. One of ordinary skill in the art would have been further motivated for the excess confection to be provided by expansion of confection which was filled into the cavity in order to provide a final product that was less dense; in other words when the excess confection was provided by filling the area, when formed the product would contain a greater amount of the confection and be more dense, as opposed to when the excess confection was provided by allowing the confection which was filled into the cavity to expand and thus forming a product which would contain

more gas and less confection. Based on the teachings and suggestions of the prior art and the knowledge generally available, one of ordinary skill in the art would have a reasonable expectation of success in yielding predictable results.

(3) Alternatively, to switch the order of performing process steps, i.e. the order of the addition of the ingredients into the final mixture, would be obvious absent any clear and convincing evidence and/or arguments to the contrary (MPEP 2144.04 [R-1]). “Selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results”; In the instant case as Ezaki teaches of a product which is joined together by a strong force, because of the excess confectionary material outside of the mold cavities, and as the product of Ezaki would inherently expand, as discussed above and as admitted by applicant (declaration filed November 19, 2010, bullet 5) and the instant disclosure is for the claimed product, wherein the product is allowed to expand and then joined together with a strong force, because of excess material outside of the mold cavities, one of ordinary skill in the art would not expect that the switched order of confectionary expansion before or after combining of the mold pieces to provide for new and unexpected results, absent any clear and convincing arguments and/or evidence to the contrary.

Ezaki is silent to the overrun of the frozen confection as about 30-130% as recited in claim 17.

Hui discloses of novelty equipment utilized for ice creams. Hui teaches that the sales performance of novelties has been and continues to be strong. Hui teaches the process of filling molds with expanded ice cream products (i.e. ice cream with overrun) is performed at high speeds. Hui teaches that with molding, a pump arrangement is included. Hui teaches that when pumping it is effective to produce a product that melts more slowly and retains more overrun. Hui teaches of a savings for a 2.75 fluid ounce bar (i.e. mould) at a 65% overrun. Refer specifically to Pages 251 and 252.

Regarding the overrun percentage as 30-130%, preferably from 45-130%, it would have been obvious to one skilled in the art at the time the invention was made to include an overrun of 65% since Hui teaches that overrun ice cream products which are molded and extruded at 65% increase the amount of the final product (or save a portion

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of the product that could be lost). To select a particular percentage of overrun would have been obvious depending on the particular degree of savings desired.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-10, and 13-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as not patentably distinct from claims 1, 3, and 4 of commonly assigned copending Application No. 11/891,208 ('208) as amended July 8, 2010.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both are directed towards a process of manufacturing frozen aerated products comprising providing two separate forming elements with forming cavities, filling the two open cavities with a product having an overrun within the range 30-130%, allowing the product to expand outside the cavity, then moving the two open cavities opposite one another so that the product of one cavity is pressed against the product of the other cavity wherein the forming elements in the mold at a temperature

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below -80C and are cooled with liquid nitrogen. The only difference is '208 does not teach the temperature at which the product is when filled into the cavities, the frozen aerated product as ice cream, or the rotation of the rollers.

Regarding the frozen aerated confection as ice cream, as ice cream was a well known frozen aerated confection, the claims of '208 which recite a frozen aerated confection encompass an ice cream. Furthermore, to use a known frozen aerated product, including ice cream, would have been obvious to one of ordinary skill in the art.

Regarding the temperature at which the product was filled into the cavities, it was known in the art at the time the invention was made for frozen confections to be filled at about -7C. It would have been obvious to one of ordinary skill in the art at the time the invention was made to fill the frozen product into the mold at a temperature that was known in the art and would allow the product to be molded, i.e. would not be too stiff or frozen, but at which the product would not melt. To do so would be routine determination of one of ordinary skill in the art at the time the invention was made and would be a result effective variable based upon the composition of the confection and would not impart a patentable distinction to the claims.

Regarding the rotation speed of the rollers, specifically variable rotational speeds and the rotational speed of the rollers at a stop when the filling device is over a mold cavity and two filled mold cavities face each other, and at a maximal value when the filling device is between two mold cavities, it would have been obvious to one of ordinary skill in the art at the time the invention was made to stop the rollers, i.e. to be at a minimal rotational value, at the same time when the filling device is over a mold cavity and two filled mold cavities face each other so that the mold cavities could be properly filled (i.e. without spillage, to the correct level, ect) and so that the frozen confection material within the mold cavities can solidify and expand to take the shape of the mold cavity. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the maximal rotational value of the rollers to be when the filling device is between two mold cavities, in order to expedite the processing, such that there is minimal lag time between the fillings. One would have been further motivated to vary the rotation speeds depending on the desired degree of filling and pressure in the



molding cavity. To do so would be routine practice of one of ordinary skill in the art at the time the invention was made and would not impart a patentable distinction to the claims absent any clear and convincing arguments and/or evidence to the contrary.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Terminal Disclaimer***

The terminal disclaimer filed October 12, 2010 has not been accepted because: It has been determined that the language (155 and 156) makes the Terminal Disclaimer indefinite, as those statutes do not cover the same rights. Applicant is referred to the form at the end of Chapter 1400 or the form paragraphs in MPEP 1490.

### ***Response to Arguments***

Applicant's arguments filed October 12, 2010 and November 19, 2010 and declaration filed November 19, 2010 have been fully considered but they are not persuasive.

Applicant argues that there is no teaching or suggestion in the reference of the confection being allowed to expand. Applicant's argument is not convincing. The claimed limitation is taught and/or obvious over the prior art and the knowledge generally available to one of ordinary skill in the art as discussed above.

Applicant argues in the declaration that Ezaki does not allow sufficient time and space for the aerated frozen food to expand between mould filling and product fusion. Applicant's argument is not convincing as it is insufficient. As applicant has provided no explanation or basis for the conclusion that there is insufficient time and space for expansion; and as Ezaki teaches that there is space after mould filling and before product fusion which would inherently allow for product expansion the argument is not convincing.

Applicant argues in the declaration, that as generally in the art, and as Ezaki has done, the filler is in intimate contact with the roller. Applicant's argument is not convincing as Ezaki teaches that the filler is "almost in contact" with the roller surface

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(page 4 lines 15-20), thus teaching space in between the filler and roller surface. Furthermore, to provide space and allow for product expansion would have been obvious as discussed above.

Applicant argues that Ezaki teaches away from cooling rollers as the rollers of Ezaki are heated. Applicant's argument is not convincing as (1) although Ezaki teaches of heated rollers to allow for better removal of the confection from the mold, Ezaki teaches that the structures of the components of the die rolls and filling device and the product discharge means are not restricted to those mentioned in the embodiment disclosed, and various modifications are permitted (page 10 lines 15-21); and (2) It would have been obvious to one of ordinary skill in the art at the time the invention was made to cool the forming elements with liquid nitrogen to below -50C, including -100C in order to keep the confectionary products frozen and allow for easy release of the confectionary product from the mold as taught by Martinez. One would have been further motivated to use liquid nitrogen to cool the forming elements since Martinez teaches that liquid nitrogen is typically used to cool the molds and thus one of ordinary skill in the art at the time the invention was made would expect that the liquid nitrogen be readily available and affordable.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KELLY BEKKER whose telephone number is (571)272-2739. The examiner can normally be reached on Monday through Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kelly Bekker/  
Examiner  
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